City of Fort Smith, Arkansas
Minutes of the Streets, Bridges and Associated Drainage
Capital Improvements Plan (CIP) Advisory Committee Meeting
December 6, 2018

A meeting of the Streets, Bridges and Associated Drainage Capital Improvement Plan (CIP) Advisory Committee was called to order at 4:42 p.m. on December 6, 2018, at the Elm Grove Community Center (Oak Room) 1901 North Greenwood Avenue.

Committee Members Present:
Stan Vlademar – Ward 1
Robert Brown– Ward 3 (Chairman)
David Armbruster – Ward 3
Matthew Alt – Ward 3
Philip Rosar – Ward 4

Committee Members Absent:
Tiffinee Baker – Ward 2
Nathaniel Deason – Ward 4

City Staff Present:
Stan Snodgrass, Director of Engineering
Jennifer Stevens, Accounting Technician

Minutes of the October 4, 2018 Meeting

David Armbruster asked to amend the minutes to note that his vote for the 2019 CIP Program was under protest. Stan Vlademar made a motion, seconded by Matthew Alt to approve the minutes as amended. The motion to approve the minutes as amended was approved with all in favor and none opposed.

Old Business:

Update on evaluation of May Branch and Town Branch Drainage Basin.

Stan Snodgrass introduced Travis Scott with FTN Associates, who was present to provide additional information regarding options in the May Branch / Town Branch drainage basin. Stan noted that the CIP committee had asked for an evaluation of a buyout option for flooding properties in these drainage basins.

Travis Scott's presentation is attached. A summary of the various options include:

- May Branch (100-year) COE channel construction: $65 million

- May Branch (10-year) channel construction: $26 million - $30 million

- Town Branch (10-year) improvement construction: $8 million – $9 million (It should be noted that channel improvements for the lower reach of May Branch at an additional cost of $17 million - $20 million are needed for the Town Branch improvements to function adequately)

- May Branch (10-year inundation area) potential property buyout: $11 million - $12 million

- Town Branch (10-year inundation area) potential property buyout: $3 million - $4 million

- Detention options were considered but rejected due to comparative costs and less significant reduction of flood impacts

Stan reiterated that the purpose of the buyout option evaluation was to determine a comparative cost with the various channel construction options. Stan noted that this was not a proposal to go out and buy all the properties in the 10 year inundation area derived from the engineering analysis.

Stan stated that FTN Associates could review similar buyout programs that other communities have in place. Stan noted that if a buyout program was ultimately approved by the Board of Directors, it would apply city wide for situations where the most cost effective option would be to purchase the property. Stan stated that he wanted some guidance from the CIP Committee on how to proceed.

Robert Brown made a motion, seconded by Stan Vlademar, to have FTN Associates review buyout programs from other communities and prepare a set of guidelines to be used for development of a similar program for Fort Smith. All were in favor with none opposed. Travis indicated he should have that information available for discussion at the next CIP meeting.

New Business:

There was no new business.

Citizen's Forum:

No citizens were present to speak.

The next meeting will be March 14, 2018, 4:30 p.m., at the Elm Grove Community Center (Oak Room), 1901 North Greenwood Avenue.

With no further discussion or business, a motion to adjourn was made by Robert Brown at 7:00 p.m. David Armbruster seconded the motion. All were in favor with none opposed.

May Branch / Town Branch Investigation Results

FTN Associates for the City of Fort Smith

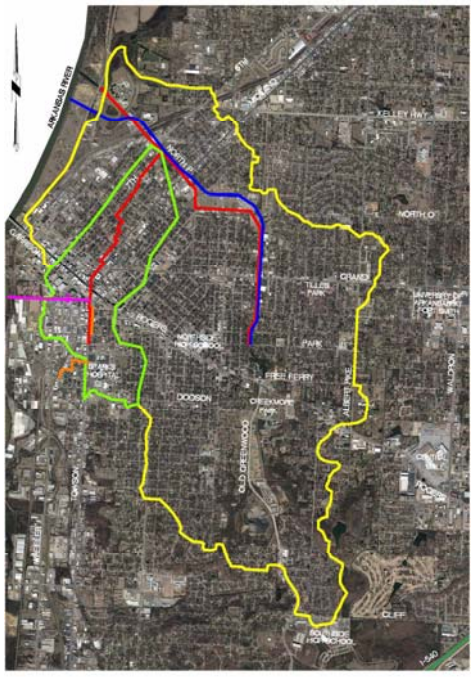
CIP Advisory Committee Meeting

Thursday Dec. 6, 2018, Elm Grove Community Center

Project Location and Purpose

- Flooding on May Branch & Town Branch
- Town Branch has been covered, in downtown area, since late 1800s
- May Branch has been covered since early 1900s
- Historical issues with flooding as far back as early 1900s

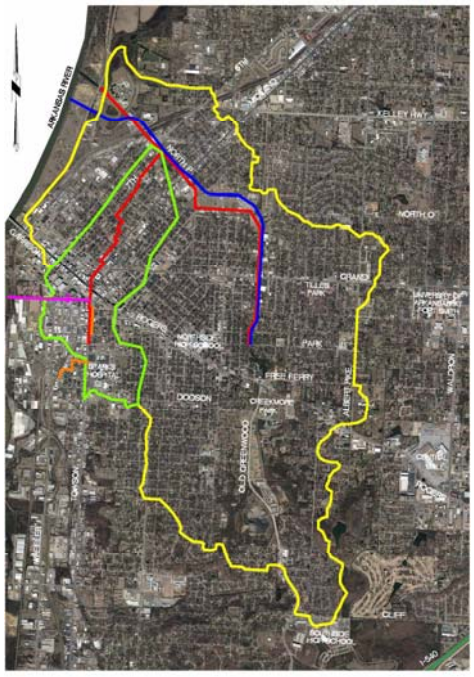
May Branch Basin



Project Location and Purpose

- USACE May Branch Study, Design, and Conclusion (late 1990s - 2016)
  - Improved reach of approximately 15,000 ft (AR River to Park Avenue)
    anticipated costs $65,000,000
  - Improved reach of approximately 4,800 ft (AR River to Town Branch discharge at 7th and P St)
    anticipated costs $30,000,000 and no federal funds for project

May Branch Basin



Scope of FTN Study and Analysis

- Initial - Town Branch hydraulic model update (2016)

  - even a 2-year (50% annual-chance) event causes some street flooding in downtown and further downstream

  - substantially reduced flooding can occur on Town Branch when the downstream reach of May Branch (4,800 ft) is improved BUT flooding on the Arkansas River still could result in upstream damages

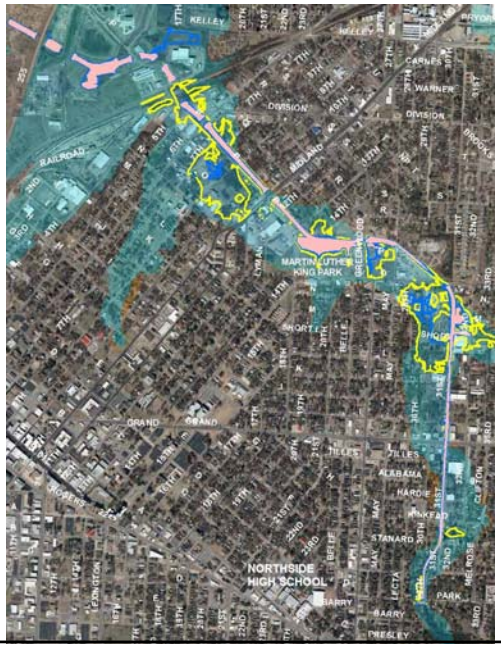
  - lesser reductions in flooding occur on Town Branch if no improvements are made on May Branch

  - storm amounts: 2-year, 24-hour storm event: 3.66 inches;

  10-year, 24-hr event: 6.3 inches; 100-year, 24-hr event: 9.6 inches

Town Branch 2-year event

Scope of FTN Study and Analysis



- 2nd phase - May Branch and Town Branch Engineering Studies and conceptual level designs (completed early 2018)

Revised USACE May Branch design to contain 10-year (10% chance) event within the new channel*

Same 15,000 ft reach extent

Conceptual Opinion of Cost: $26 million to $30 million

Lower reach of 4,800 ft, Cost:

$17 million to $20 million

* 10-year mapping does not consider effects of Arkansas River flood backwater

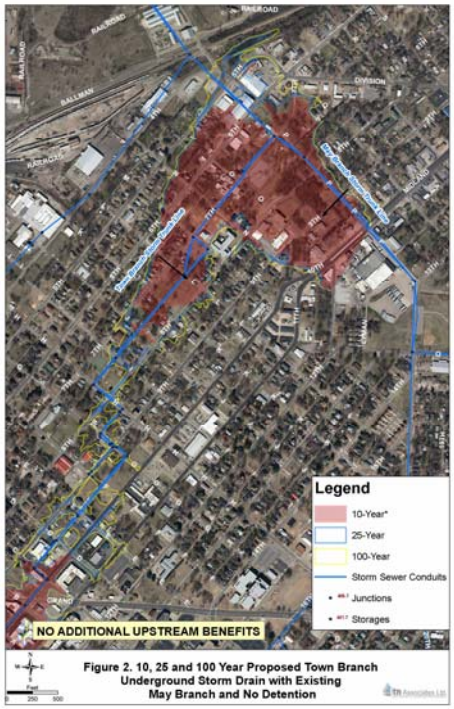


Figure 2. 10, 25 and 100 Year Proposed Town Branch Underground Storm Drain with Existing May Branch and No Detention

FTN Study and Analysis

- 2nd phase - May Branch and Town Branch Engineering Studies and conceptual level designs (completed early 2018)

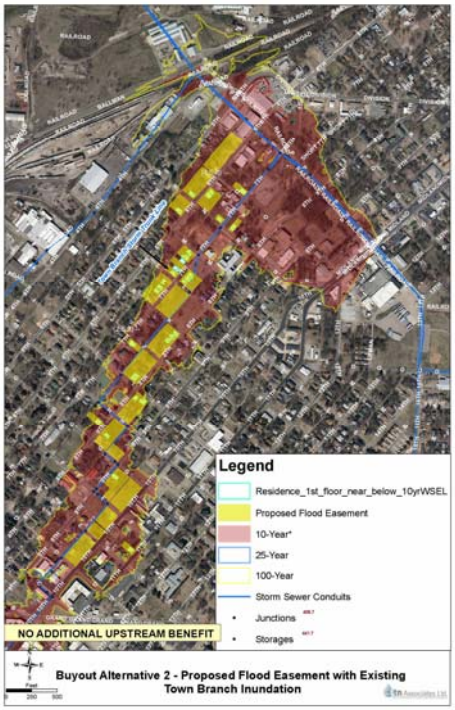
Hydraulics and Design - Town Branch 10-year analysis

Improvement alternatives considered without May Branch improvements due to cost

Underground Storm Drains

Conceptual Opinion of Cost:

$8 million to $9 million



Buyout Alternative 2 - Proposed Flood Easement with Existing Town Branch Inundation

FTN Study and Analysis

- 2nd phase - May Branch and Town Branch Engineering Studies and conceptual level designs (completed early 2018)

Hydraulics and Design - Town Branch 10-year analysis

Also Considered: Detention Storage - rejected

Cost $3 million - $4 million, minor improvements only

Potential Buyouts; Conceptual Cost

Alternative 1, 30 properties*; $1.7 million - $2 million

Alternative 2, 71 properties*; $3.7 million - $4 million

* Selected primarily residential properties with Finished Floor Elevation exceeded by computed 10-year Town Branch flood elevation

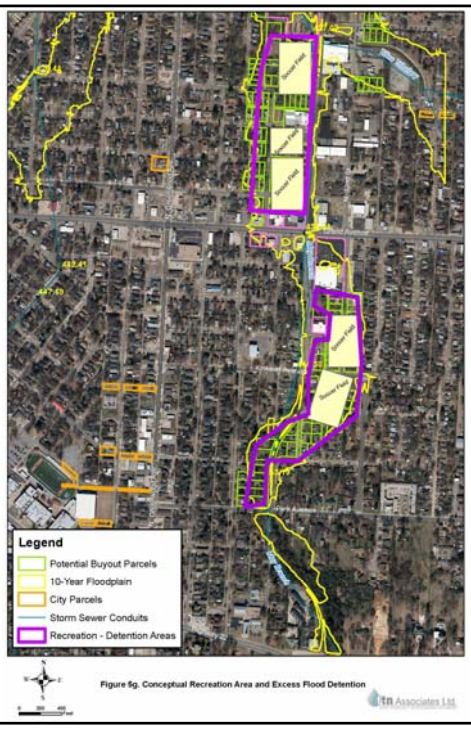


Figure 5g. Conceptual Recreation Area and Excess Flood Detention

FTN Study and Analysis

- 2nd phase additional - May Branch Engineering Studies and conceptual level designs (December 2018)

Hydraulics and Design - May Branch 10-year analysis

Considered: Detention Storage

Anticipated Cost: $ 16 million - $17 million, only minor reductions in flooding (generally 0.5 ft or less, except at Grand Avenue)

Would require purchase of nearly 130 parcels including residential and business properties upstream of Short L Street

Excludes some parcels for economic reasons

Figure 5e. North May Branch Potential Buyout 10-year Flood Extent - Complete

FTN Study and Analysis

- 2nd phase additional - May Branch Engineering Studies and conceptual level designs (December 2018)

May Branch 10-year hydraulic analysis

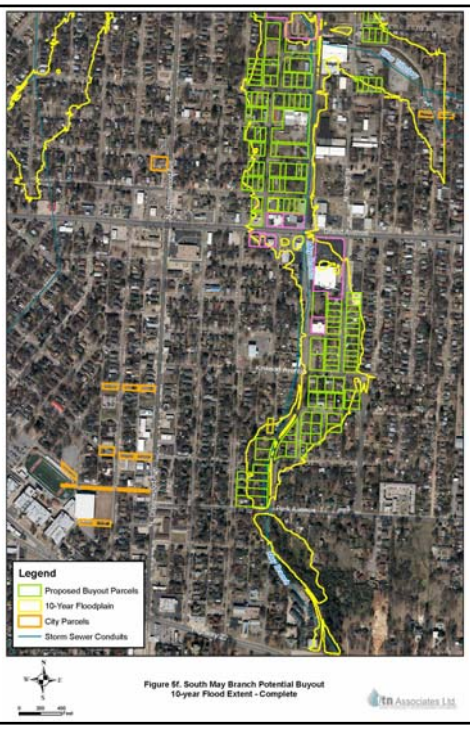
Considered: Potential Buyouts/conversion to green space

Approximately 230 properties*

Anticipated Cost: $11 million - $12 million

*Residences, selected businesses, vacant land

Excludes some parcels for economic reasons



FTN Study and Analysis

- 2nd phase additional - May Branch Engineering Studies and conceptual level designs (December 2018)

May Branch 10-year hydraulic analysis

Considered: Potential Buyouts/Conversion to green space

Approximately 230 properties*

Anticipated Cost: $11 million - $12 million

*Residences, selected businesses, vacant land

Excludes some parcels for economic reasons

SUMMARY

- May Branch (10-year) channel construction: $26 million - $30 million
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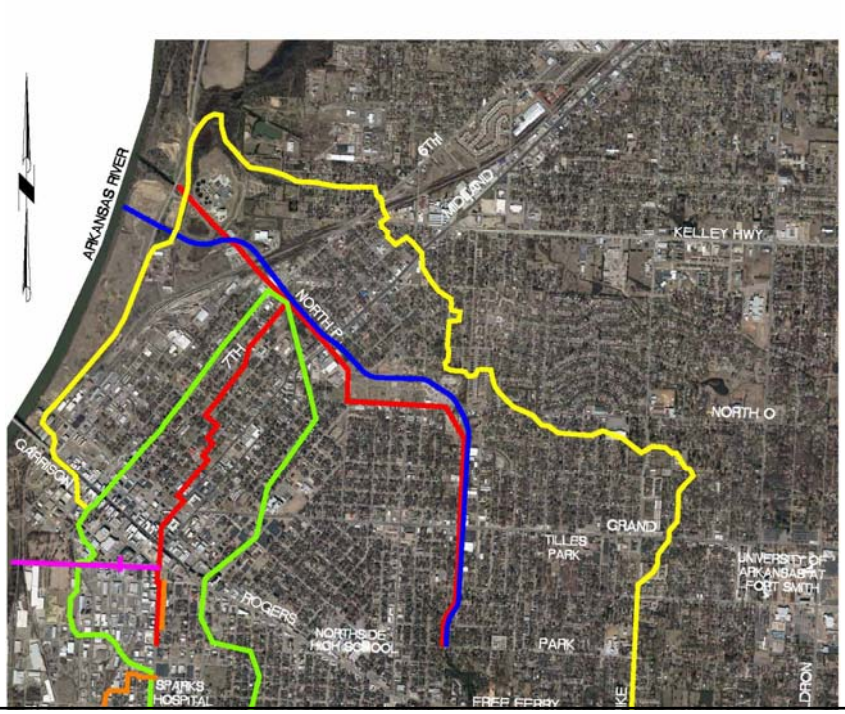
May Branch Basin



Questions?